

THE FOLLOWING MARKING REQUIREMENTS APPLY TO THE ASSEMBLY:

- PERMANENT MARKING OF ALL PRESSURE BOUNDARY PARTS/ITEMS.
- TEMPORARY MARKING OF THE ASSEMBLY

PERMANENT MARKING OF EACH PRESSURE BOUNDARY PART IS REQUIRED. (THE PARTS WHICH ARE CONSIDERED PRESSURE BOUNDARY PARTS ARE IDENTIFIED ELSEWHERE IN THIS PURCHASE ORDER DOCUMENT.)

THE FOLLOWING INFORMATION IS TO BE PERMANENTLY MARKED ON EACH PRESSURE BOUNDARY PART. WHERE THE SIZE, SHAPE, TYPE OR CONDITION OF THE PIECE/ITEM PRECLUDES THE APPLICATION OF THE REQUIRED MARKING, THE INFORMATION SHALL BE APPLIED IN THE ORDER LISTED BELOW. ANY REMAINING PERMANENT MARKING REQUIREMENTS MUST BE TEMPORARILY MARKED (TAGGED) ON THE ASSEMBLY.

1. MATERIAL CODES- THE APPROPRIATE CODE(S), IF NOT FOUND ELSEWHERE IN THIS PO, SHALL BE ACCESSED AT [HTTP://WWW.NN.NORTHROPGRUMMAN.COM/SOURCING/INDEX.STM](http://www.nn.northropgrumman.com/sourcing/index.stm) (PO PERMANENT MARKING MATERIAL CODES). THESE CODES MUST BE USED IN LIEU OF ANY OTHER MATERIAL CODES, GENERIC OR INDUSTRY, INCLUDING MATERIAL CODES WHICH MAY BE REQUIRED BY INDIVIDUAL MATERIAL SPECIFICATIONS.

IF THERE IS NO MATERIAL CODE LISTED FOR THE FINISHED PRODUCT SPECIFICATION AND THE FINISHED PRODUCT SPECIFICATION (MILITARY SPECIFICATION, DRAWING, ETC.) DOES NOT ALTER THE MECHANICAL PROPERTIES, USE THE MATERIAL CODE FOR THE BASE MATERIAL SPECIFICATION.

IF THERE IS NO MATERIAL CODE LISTED FOR THE FINISHED PRODUCT SPECIFICATION AND THE FINISHED PRODUCT SPECIFICATION DOES ALTER THE MECHANICAL PROPERTIES (BY HEAT TREATMENT, COLD FORMING, ETC.) SUBMIT A "VENDOR INFORMATION REQUEST" FOR THE APPROPRIATE MATERIAL CODE.

2. TRACEBACK ID- MUST BE A MARKING THAT PRO-

VIDES TRACEABILITY TO UNIQUE OBJECTIVE QUALITY EVIDENCE OF THE PIECE OF MATERIAL INCLUDING LOT, HEAT, MELT OR BATCH AND ALL MANUFACTURING TEST AND INSPECTION INFORMATION. TRACEBACK ID MUST CORRELATE TO THE CERTIFICATION DOCUMENTATION. WHEN THE PROCUREMENT SPECIFICATION REQUIRES CHEMICAL/MECHANICAL TESTING OR VISUAL/DIMENSIONAL INSPECTION AND DOES NOT DEFINE A LOT, THE FOLLOWING SHALL APPLY:

- A. FOR CHEMICAL ANALYSIS, THE MATERIAL MUST BE THE SAME HEAT. HEAT IS DEFINED AS "THE METALLIC OUTPUT OF ONE FURNACE CHARGE". FOR MATERIAL PRODUCED BY THE CONTINUOUS CASTING PROCESS, IF THE SPECIFICATION DOES NOT PRESCRIBE SPECIFIC TRACEBACK ID REQUIREMENTS, THE TRACEBACK ID MUST BE A DESIGNATOR THAT WILL PROVIDE TRACEABILITY TO OBJECTIVE QUALITY EVIDENCE WHICH IS REPRESENTATIVE OF THE MATERIAL FURNISHED TO NNS.
 - B. FOR DETERMINATION OF MECHANICAL PROPERTIES, THE MATERIAL MUST BE OF THE SAME HEAT AND HEAT TREATED, WHEN APPLICABLE, IN THE SAME BATCH OR CONTINUOUS HEAT TREATMENT PROCESS.
 - C. FOR VISUAL AND DIMENSIONAL INSPECTION, A LOT CONSISTS OF ALL ITEMS HAVING COMMON PHYSICAL CHARACTERISTICS (I.E., PRESSURE RATING, DRAWING FIGURE NUMBER, ETC.).
3. MANUFACTURER'S ID- MUST BE A MARKING THAT REPRESENTS THE MANUFACTURER'S COMPANY NAME, TRADE NAME OR TRADE SYMBOL NUMBER.

THE FOLLOWING INFORMATION IS TO BE TEMPORARILY MARKED ON EACH ASSEMBLY - OR - PACKAGE/BUNDLE:

4. TRACEBACK ID- ASSIGNED TO ANY ASSEMBLY MAY BE THE SAME NUMBER AS THE LOT IDENTIFICATION NUMBER ASSIGNED TO ONE OR MORE OF THE INDIVIDUAL PARTS; IT MAY BE A PURCHASE ORDER ITEM NUMBER; IT MAY BE A MANUFACTURER'S SERIAL NUMBER. REGARDLESS OF WHAT IS USED, THERE MUST BE POSITIVE TRACEABILITY

BETWEEN THE ASSEMBLIES AND THE TESTS PERFORMED ON THE ASSEMBLIES. SOME EXAMPLES OF THE TESTS ARE:

- CALIBRATION
- ADJUSTMENT
- FUNCTIONAL TEST RESULTS
- PERFORMANCE CHARACTERISTICS
- RADIOGRAPHIC INSPECTION
- REPAIR OR MODIFICATION

NOTE: FOR ASSEMBLIES, A LOT WILL CONSIST OF ALL ASSEMBLIES COVERED BY THE SAME REPORT OF TESTS.

5. PURCHASE ORDER ID- MUST BE A MARKING THAT IDENTIFIES THE NNS PURCHASE ORDER AND PURCHASE ORDER ITEM NUMBER(S) OF THE MATERIAL INVOLVED.
6. MANUFACTURER'S ID- MUST BE A MARKING THAT REPRESENTS THE MANUFACTURER'S COMPANY NAME, TRADE NAME OR TRADE SYMBOL NUMBER.